Attorney's Docket No. TKR 2050

DECLARATION AND POWER OF ATTORNEY

REGULAR OR DESIGN APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled:

ONA D D	POLY	MERASES WIT	H ENHANCED	LENGTH	OF	PRIMER	EXTENS	SION	
∏the ≟	spec:	ification o	f which:						
크(che] U	ck o	ne)							
U	[X]	is attached	d hereto						
i	[]	was filed					on Ser	cial No.	
4			_, and was	amended	on				. •
3	[]	was descri	oed and cla	aimed in	PC	T Inter	nation	al Appl	ication
_		No	, i	filed on				and as	amended
뒣		under PCT A	Article 19	on			_, if	any.	
3								· -	

ACKNOWLEDGEMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations §1.56.

PRIORITY CLAIM

I hereby claim foreign priority benefits under Title 35, United States Code, §119 (a) - (d) or §365(b) of any foreign application for patent or inventor's certificate, or §365(a) of any PCT application which designates at least one country other than the United States of America, listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Priority Claimed

	(Number)	(Country)	(Day/Month/Year Filed)
	(Number)	(Country)	(Day/Month/Year Filed)
	(Number)	(Country)	(Day/Month/Year Filed)
		Priority N	ot Claimed
		• • •	AME SUBJECT MATTER WHICH HAS A FILING ATION FROM WHICH PRIORITY IS CLAIMED
	(Number)	(Country)	(Day/Month/Year Filed)
— Ö ≟	CLAIM F	OR BENEFIT OF PRO	OVISIONAL APPLICATION(S)
I he	reby claim the be United States pro	enefit under Titl ovisional applica	e 35, United States Code, §119(e) of tion(s) listed below.
* 	(Application	n Number)	(Filing Date)
	(Application	Number)	(Filing Date)
	LAIM FOR BENEFIT	OF EARLIER U.S.	APPLICATION(S) UNDER 35 U.S.C. 120

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s), or §365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code §112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application:

5,436,149	2/19/93	patented			
(Serial No.)	(Filing Date)		•	pending,	abandoned)
08/483,535	6/7/95	<u>pendin</u>	<u>q</u>		
(Serial No.)	(Filing Date)	(Status:	patented,	pending,	abandoned)

POWER OF ATTORNEY

I hereby appoint the following attorneys to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

Irving Powers (15,700), Donald G. Leavitt (17,626), John K. Roedel, Jr. (25,914), Michael E. Godar (28,416), Edward J. Hejlek (31,525), William E. Lahey (26,757), Richard G. Heywood (18,224), Frank R. Agovino (27,416), Kurt F. James (33,716), G. Harley Blosser (33,650), Paul I. J. Fleischut (35,513), Vincent M. Keil (36,838), Robert M. Evans, Jr. (36,794), Robert M. Bain (36,736), Kathleen M. Petrillo (35,076), Rudolph A. Telscher, Jr. (36,032), Paul A. Stone (38,628), Cindy S. Kaplan (40,043), David E. Crawford, Jr. (38,118), Paul A. Maddock (37,877), Charles E. Cohen (34,565), Scott A. Williams (39,876), and Richard L. Bridge (P-40529).

Send Correspondence To:	Direct Telephone Calls To:
Customer Number: 000321	G. Harley Blosser (314) 231-5400
true and that all statements made on to be true; and further that these s	lse statements may jeopardize the atent issued thereon.
Inventor's signature Residence 223 Renaldo Drive Post Office address Chesterfield, M	Date 9/12/97 Citizenship US issouri, 63017
Full name of second joint inventor _	· · · · · · · · · · · · · · · · · · ·
Second inventor's signature Residence Post Office address	

ASSIGNMENT

WHEREAS, I, Wayne M. Barnes of Chesterfield, Missouri 63017 have invented an improvement in DNA POLYMERASES WITH ENHANCED LENGTH OF PRIMER EXTENSION (file TKR 2050) and have executed an application for a United States patent based thereon Serial Number 08/931,818 filed September 16, 1997;

AND, WHEREAS, Takara Shuzo Co., Ltd. of Otsu, Shiga,

Japan, a corporation (hereinafter referred to as "ASSIGNEE"), is

desirous of acquiring certain rights thereunder;

NOW, THEREFORE, for one dollar and other good and valuable consideration, receipt of all of which is hereby acknowledged, I have agreed to and do hereby sell, assign, and transfer unto said ASSIGNEE the entire right, title, and interest in and throughout the United States of America (including its territories and dependencies) and all countries foreign thereto in and to said invention, said United States application, any other United States applications (including divisional, continuing or reissue applications) based in whole or in part on said United States application or in whole or in part on said invention, any foreign applications based in whole or in part on any of the aforesaid United States applications or in whole or in part on said invention, and any and all patents (including extensions thereof) of any country which have been or may be granted on any of the aforesaid applications or on said invention or any part thereof;

TO BE HELD AND ENJOYED by said ASSIGNEE, its successors and assigns, as fully and entirely as the same would have been

held and enjoyed by me had no sale and assignment of said interest been made;

AND I hereby authorize and request the Commissioner of Patents of the United States of America to issue any and all United States patents which may be granted upon said United States applications or any of them, or upon said invention or any part thereof, to said ASSIGNEE;

AND I hereby agree for myself and for my heirs, executors and administrators, to execute without further consideration any further lawful documents and any further assurances; and any divisional, continuing, reissue, or other applications for patents of any country, that may be deemed necessary by said ASSIGNEE fully to secure to said ASSIGNEE its interest as aforesaid in and to said invention or any part thereof, and in and to said several patents or any of them;

AND I hereby covenant for myself and my legal representatives, and agree with said ASSIGNEE, its successors and assigns, that I have granted no right or license to make, use or sell said invention, to anyone except said ASSIGNEE, that prior to the execution of this deed my right, title, and interest in said invention had not been otherwise encumbered, and that I have not executed and will not execute any instrument in conflict herewith.

IN WITNESS WHEREOF, I have hereunto set my hand.

Wayne M. Barnes

<u>ACKNOWLEDGEMENT</u>

COUNTY OF St Louis City

December

On this 14h day of October, 1997 before me,

Mrenda C. W. Fschore K, a Notary Public, personally appeared Wayne
M. Barnes to me known to be the person described in and who
executed the foregoing assignment and acknowledged that he
executed same as his free act and deed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal the date and year last above written.

Brends C. Witschurch
Notary Public

My Commission Expires:

Ellis O Million K Entire of the Control of the Con



UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

FEBRUARY 07, 1998

PTAS

SENNIGER, POWERS, LEAVITT & ROEDEL G. HARLEY BLOSSER, ESQ. ONE METROPOLITAN SQUARE 16TH FLOOR ST. LOUIS, MO 63102



TKR 2050 GHB/EHG

UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

16)

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, NORTH TOWER BUILDING, SUITE 10C35, WASHINGTON, D.C. 20231.

RECORDATION DATE: 12/12/1997

REEL/FRAME: 8854/0683 NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

BARNES, WAYNE M.

DOC DATE: 12/08/1997

ASSIGNEE:

TAKARA SHUZO CO., LTD.

SETA 3-4-1

CENTRAL RESEARCH LABORATORIES OTSU, SHIGA, JAPAN 520-21

SERIAL NUMBER: 08931818

PATENT NUMBER:

FILING DATE: 09/16/1997

ISSUE DATE:

ANTIONE ROYALL, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS



FORM PTO-1595 (Rev. 3-93) OMB No. 055* 3011 (exp. 4/94)	12-31	-1997	U.S. DEPARTMENT OF COMMERCE Raten and Trademark Office			
Tab settings ⇒ ⇒ ♥ ▼			V DEGVIO MAY			
To the Honorable Commissioner of Patent	10059	The same and the same	d original documents or copy thereof.			
Name of conveying party(ies): Name M. Reman	1	2. Name and addr	ess of receiving party(ies)			
Wayne M. Barnes		Name: Tak	kara Shuzo Co., Ltd.			
Additional name(s) of conveying party(ies) attached? Q	Yes ⊠ No	Internal Address	s: <u>Central Research Laboratorie</u> s			
3. Nature of conveyance:						
☐ Assignment ☐ M ☐ M ☐ M ☐ M ☐ M ☐ M ☐ M ☐ M ☐ M ☐ M	lerger	Street Address:	Seta 3-4-1			
☐ Security Agreement ☐ C	hange of Name	Otsu. Shiga.	520-21 JAPAN			
□ Other		City:	State: ZIP:			
Execution Date:	.97	Additional name(s)	å address(es) attached? ☐ Yes 🎗 No			
4. Application number(s) or patent number(s):		•				
If this document is being filed together with		ne execution data o	f the application in			
·	a now application, i					
A. Patent Application No.(s)		B. Patent No.(s)				
Ser. No. 08/931,818 (filed	9/16/97)					
Α	additional numbers attache	ed? □ Yes 🔀 No				
Name and address of party to whom corres concerning document should be mailed:	pondence	6. Total number of	applications and patents involved:			
Name: G. Harley Blosser, Esq.		7. Total fee (37 CF	R 3.41)s 40.00 E			
Internal Address: Senniger: Powers.	Leavitt	⅓ XEnclosed	·			
& Roedel		Authorized to be charged to deposit account				
Street Address: One Metropolitan Sc	quare (3. Deposit account	number:			
16th Floor						
City: St. Louis State: MO	ZIP: 63102	(Attach duplicate co	py of this page if paying by eposit account)			
	DO NOT USE TH	IS SPACE	08931			
Statement and signature. To the best of my knowledge and belief, the the original document.	foregoing information	n is true and correc	9200			
G. Harley Blosser Name of Person Signing	D./failes	Slam	= 2/8/97 Date			
Total number	r of pages including cover	sheet, attachments, ar	nd document:			